



**SAE** *International*

**Defense Standardization Program  
Conference**

**Joint Standards Board for Power Source  
Systems**



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*JSB for Power Source Systems*

# Joint Standardization Board (JSB) for Power Source Systems (PS<sup>2</sup>)



The purpose of the JSB for Power Source Systems is to:

- Provide senior level (USD AT&L) visibility for standardization and interoperability initiatives.
- Establish DoD Standards (IAW DOD 4120.24-M, Defense Standardization Program, Policies and Procedures) or Non-Government Standards as applicable.
- Improve interoperability of joint and coalition forces.
- Recommend joint doctrine, tactics, techniques and procedures.
- Establish standardization of parts/components that have lowered cost, reduced inventories, shortened logistics chains and improved readiness.
- Develop joint solutions to issues that impact the Power Source Systems domain.
- Propose funding requirements for specific efforts/projects related to standardization and interoperability goals and objectives.
- Provide the interface for commercial/military integration.

# Unified Power Team Approach JSB for Power Source



JSB-PS<sup>2</sup>

**PS-TWG**

- Increase visibility of DoD power standardization
- Recommend DoD standards
- Improve interoperability
- Membership includes government, industry & academia

# Unified Power Team Approach

## DoD Power Sources TWG



JSB-PS<sup>2</sup>

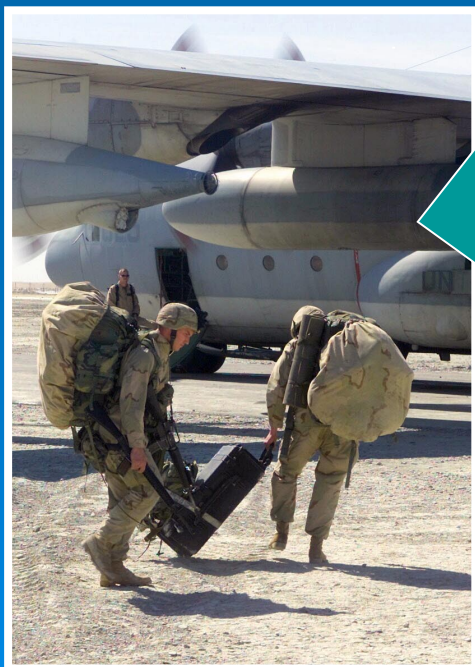
PS-TWG

- Technology Working Group (TWG) formed to address technology and manufacturing issues
- Develop overarching approach and strategy
- Improve connectivity between agencies
- All DoD agencies represented (Government only)

# DoD Power Source Drivers



- Increasing power requirements
- Increasing energy requirements
- Smaller size
- Lighter weight
- Stable responsive manufacturers
- Environmentally benign





# the Problem

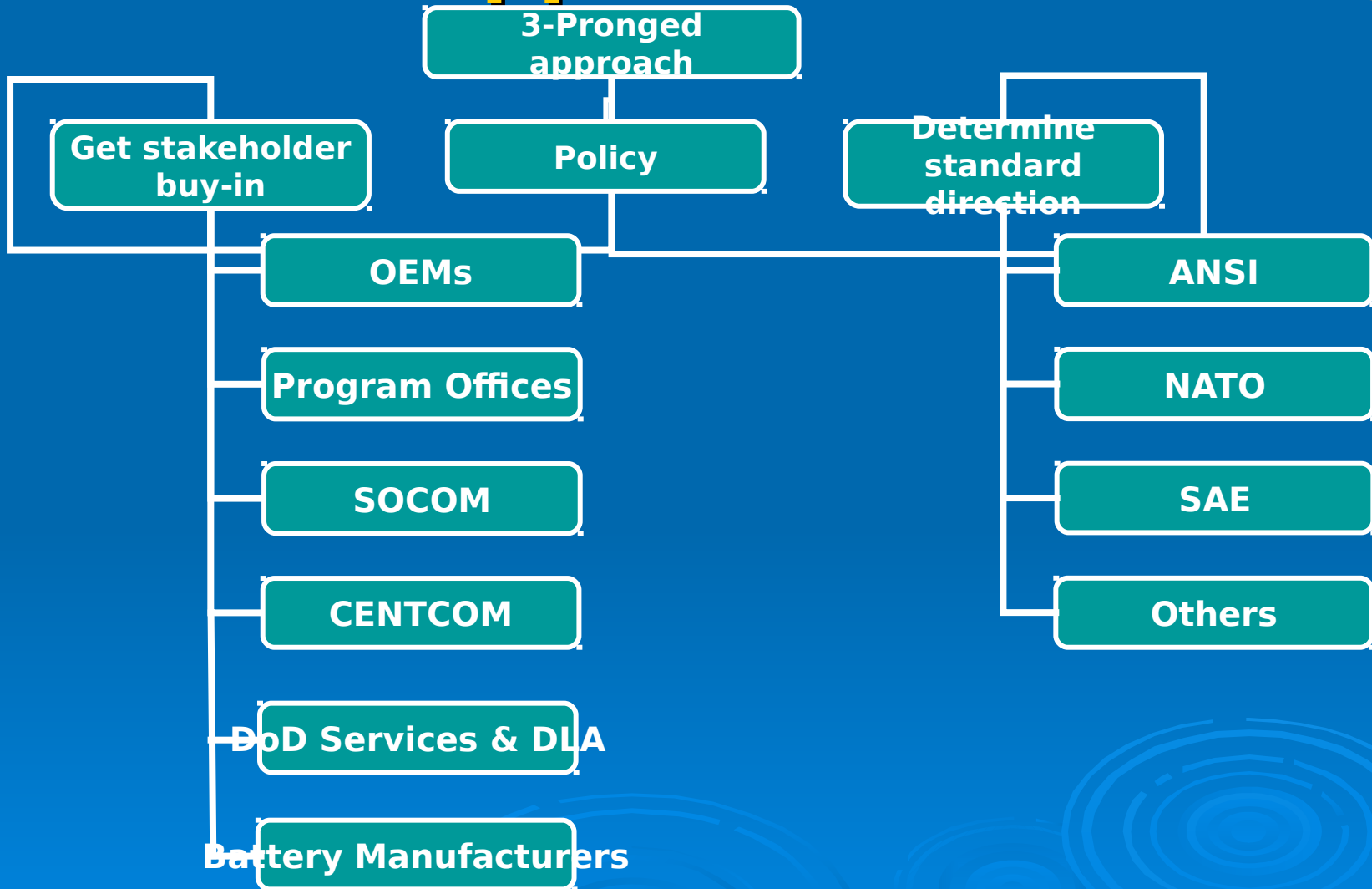
- DoD manages over 5,000 power related Items (DLA manages over 4,500 NSNs)
- Managing numerous battery types adversely effects cost and availability
- War fighter is impacted by the lack of inoperability
- Military unique and boutique batteries add costs





***This picture represents less than 10% of the battery types in the DoD inventory***

# A Standardization Approach





# Power Specification Tool



- Web based system
  - Sorts and searches by critical parameters
  - Includes both commercial and DoD designs
- Multiple technologies will be included
  - Batteries (primary, rechargeable, and reserve)
  - Fuel cells
  - Electrochemical capacitors
- Will include both open and secure sections
  - Secure would include DoD sensitive material (example: usage data)

# Power Specification Tool Uses



- Helps identify batteries that can be eliminated
- Identifies commercial cells that can be integrated into military batteries
- Minimizes boutique battery development
- Identifies battery families, specifications, etc.

# Power Specification Tool



## ➤ Demonstration



# JSB Charter

## **Purpose and Scope**

- The purpose of the DoD JSB for Power Source Systems is to:
- Provide senior level (USD AT&L) visibility for standardization and interoperability initiatives.
- Establish DoD Standards (IAW DOD 4120.24-M, Defense Standardization Program, Policies and Procedures) or Non-Government Standards as applicable.
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- Provide the interface for commercial/military integration.

## **Process**

- The DoD JSB for Power Source Systems will perform those functions necessary to achieve standardization and interoperability objectives by the sharing of knowledge, and through the coordination and formulation of solutions related to the creation of standardization policies through the following:
- Participate in the development of national and international standards when developing an overarching DoD standardization strategy to support productions of affordable and readily available military essential power sources systems for the warfighter.
- Promote commonality of component parts or interfaces (as applicable) to enhance supportability by facilitating a coordinated approach to technical management of standards and standardization with joint programs.
- Promote standardization in designs for testing and evaluation.
- Interface with industry, academia and government agencies, as needed, to keep pace with progressing technology.
- Establish and maintain adequate and uniform technical records, i.e., background history and documentation, and serve as a source of subject matter expertise for the DoD.
- Provide the mechanism for exchange of technical information amongst military departments, industry, and allied organization as related to interoperability and commonality of equipment, components, and operational requirements.
- Facilitate coordination of draft documents with industry and industry associations to ensure quality and performance requirements meet the highest industry standards.
- Ensure coordination and integration of activities from working groups on specific taskings for standardizing processes and systems.
- Produce an annual review of the JSB effort. This review shall address actions taken as a result of any findings, conclusions, and recommendations reached by the JSB and will include updates to the DoD in terms of how to formulate strategies for initiatives with the greatest DoD impact and setting priorities for projects in the next fiscal year.

## **Authority**

- Under Secretary of Defense (AT&L) Memo, Subject: Joint Standardization Boards (see Working Draft).

## **Membership**

- Ideally, the Board should be composed of members from DoD and other government agencies, industry and industry associations, and academia. The Chairperson will be selected from the principal DoD/Federal Government members and rotated on a cycle determined by those members.

## **Management and Organization**

- The JSB will serve as a standing technical group for the PS2 standardization efforts. It will report to and receive tasking from the chairman on standardization issues of multi-service concern and application.
- The JSB shall include one primary member from each service or organization who is a senior level action officer (O5/O6 or civilian equivalent), and can represent their service or agency position on standardization matters and resource awareness within the scope of the JSB. Should the service or agency primary member be unable to attend a meeting, the primary member may designate an alternate within a component organization. Individuals from other government/commercial organizations, industry associations, and academia may be invited to participate as associate members. Subject matter experts from the aforementioned organization may also be invited to participate.
- Responsibilities of the JSB Chairman will include: Serving as the main interface between the JSB and the individual components; conducting JSB meetings; developing a consensus on standardization issues; ensuring that appropriate meeting minutes are recorded and published; orchestrating briefings and papers for presentation to working groups and relevant conferences; and maintaining an environment which fosters continuous improvement, coordination, innovation and free information exchange. Chairpersons will be rotated among the permanent members. The order of rotation of the Chairperson will be determined by the primary members (Army, Navy, Air Force, Defense Logistics Agency and the Missile Defense Agency).
- Chairperson rotation will occur at the same designated time each year.
- Responsibilities of primary JSB members will include: Active engagement and coordination with other members in all efforts within the JSB; participation on studies, program reviews, IPT's as required by the JSB. Primary members will be allowed to vote on decisional matters; primary members and members from component organizations will be allowed access to Government, FOUO (FOR OFFICIAL USE ONLY), and proprietary information.
- Responsibilities of Associate JSB Members will be the same as members. Associate members will not be allowed to vote on decisional matters and may not be allowed access to Government, FOUO and proprietary information.
- Administrative expenses of the JSB will be supported by the individual attendees.

## **Interfaces**

- Representatives of the panels and sub-panels may be invited to serve as ex-officio members. Representatives from other government agencies and industry may also be invited to serve as ex-officio members.
- Other offices within DoD, various government agencies, and industry may also be invited as ad-hoc participants in the JSB.
- The JSB will interface and coordinate with standards-based activities and other related activities. Program Plans/Memorandums of Understanding may be established between the JSB and sub-panel and the working groups and other panels and organizations to facilitate jointness, leveraging, and efficiency of information flow.

## **Meetings and Procedures**

- The JSB will meet a minimum of twice each fiscal year in open sessions to perform the group's mission or upon request by a voting principal member. Meetings will be scheduled by the current Chairperson with random site selection to accommodate attendance by members. Representation from the principal member's organization at the action officer level (O5/O6 or civilian equivalent) is required for all meetings. Functional area and interested organizations will be invited to open general sessions. A list of prioritized items will be made a matter of record in the general session and assigned an OPR to complete tasks as assigned by the Chairperson. The Chairperson has the authority to schedule additional meetings or set up sub-committees and working groups in coordination with the principal members, as required, to perform the group's mission.

## **Duration**

- Serves as a continuous group indefinitely unless voted on by the primary members to withdraw.

Available  
Upon Request



# What I Need From You!

- Support for JSB Power Sources efforts
- Help identify key resources to assist the effort
- Points of contact are:

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